Claims

What is claimed is:

- [c1] A method for packaging an object graph, comprising:
 - receiving a usage variable specification that includes a set of usages each usage specifying an attribute of an object in the object graph;
 - creating a transient object graph representation containing the attribute specified in the variable usage specification; and

packaging the transient object graph representation.

- [c2] The method of claim 1, wherein creating the transient object graph representation comprises identifying an object in the object graph whose attributes are specified in the variable usage specification.
- [c3] The method of claim 2, wherein identifying the object in the object graph comprises receiving a root object in the object graph.
- [c4] The method of claim 3, wherein identifying the object in the object graph further comprises using the root object to find a path to the objects whose attributes are specified in the variable usage specification.
- [c5] The method of claim 2, wherein creating the transient object graph representation further comprises representing the object with the attribute specified in the variable usage specification.
- [c6] The method of claim 5, wherein creating the transient object graph further comprises storing a represented object as a node of the transient object graph.
- [c7] The method of claim 1, further comprising:

 converting the transient object graph representation into a form suitable for transport over

 a network link.

- [c8] The method of claim 1, further comprising:

 converting the transient object graph representation into a form suitable for storage on a storage medium.
- [c9] The method of claim 1, further comprising:

 converting the transient object graph representation into a byte stream.
- [c10] The method of claim 1, further comprising:

 converting the transient object graph representation into a hash table.
- [c11] The method of claim 10, further comprising: converting the hash table into a byte stream.
- [c12] The method of claim 1, further comprising:

 representing the transient object graph representation in a structured language format.
- [c13] The method of claim 1, further comprising:

 representing the transient object graph representation in a compressed format.
- [c14] The method of claim 1, further comprising:

 representing the transient object graph representation in an encrypted format.
- [c15] A method for packaging an object graph, comprising:

 receiving a usage variable specification that includes a set of usages each usage specifying an attribute of an object in the object graph;
 - creating a transient object graph representation containing the attribute specified in the variable usage specification;

packaging the transient object graph representation; and

converting the transient object graph representation into a form suitable for transport over a network link.

[c16] A method for packaging an object graph, comprising:

receiving a usage variable specification that includes a set of usages each usage specifying an attribute of an object in the object graph;

creating a transient object graph representation containing the attribute specified in the variable usage specification;

packaging the transient object graph representation; and

converting the transient object graph representation into a form suitable for storage on a storage medium.

[c17] A transport packager, comprising:

means for receiving a usage variable specification that includes a set of usages each usage specifying an attribute of an object in the object graph;

means for creating a transient object graph representation containing the attribute specified in the variable usage specification; and

means for packaging the transient object graph representation.

[c18] A computer-readable medium having recorded thereon instructions executable by a processor, the instructions for:

receiving a usage variable specification that includes a set of usages each usage specifying an attribute of an object in the object graph;

creating a transient object graph representation containing the attribute specified in the variable usage specification; and

packaging the transient object graph representation.

- [c19] The computer-readable medium of claim 18, further comprising:
 instructions for converting each trimmed object into a form suitable for transport over a
 network link.
- [c20] The computer-readable medium of claim 18, further comprising:
 instructions for converting each trimmed object into a form suitable for storage on a storage medium.

- [c21] A computer-readable medium having recorded thereon instructions executable by a processor, the instructions for:
 - receiving a usage variable specification that includes a set of usages each usage specifying an attribute of an object in the object graph;
 - creating a transient object graph representation containing the attribute specified in the variable usage specification;
 - packaging the transient object graph representation; and
 - instructions for converting each trimmed object into a form suitable for transport over a network link.
- [c22] A computer-readable medium having recorded thereon instructions executable by a processor, the instructions for:
 - receiving a usage variable specification that includes a set of usages each usage specifying an attribute of an object in the object graph;
 - creating a transient object graph representation containing the attribute specified in the variable usage specification;
 - packaging the transient object graph representation; and
 - instructions for converting each trimmed object into a form suitable for storage on a storage medium.
- [c23] A distributed system having a client and a server, comprising:
 - an object generator interposed between the client and the server, the object generator having a capability to trim an object graph such that the trimmed object graph contains only the attributes specified in a variable usage specification; and
 - means for converting the transient object graph representation into a form suitable for transport over a network link between the client and the server.

[c24] An apparatus for packaging an object graph, comprising:

means for receiving a usage variable specification that includes a set of usages each usage specifying an attribute of an object in the object graph;

means for creating a transient object graph representation containing the attribute specified in the variable usage specification; and

means for packaging the transient object graph representation.